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# A NEW SPECIES OF *CINARA* FROM CANADA (APHIDAE)

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I wish to acknowledge the assistance of Mrs. M. E. MacGillivary of the Field Crop Insect Laboratory, Fredericton, N. B., Canada who collected the material from which this interesting species is described.

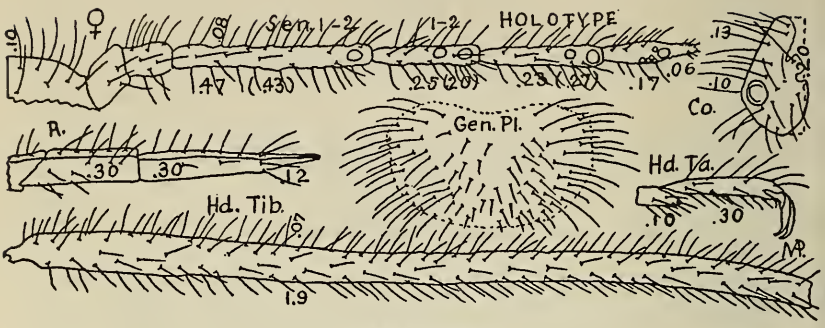
**Cinara acadiana** n. sp.

*Apterous viviparous female.*

Size and general color.—Length from vertex to end of anal plate varying from 2.92-3.15 mm. Color notes not made from living specimens. Color of mounted specimens which were cleared, as follows: head dusky brown. First and second antennal segments slightly darker than head, third fourth and fifth antennal segments pale dusky, third segment slightly darker at apex, fourth and fifth segments with apical regions darker than base, sixth antennal segment uniform dusky, much the darkest antennal segment. Femora pale dusky with apical portions much darker. Tibiae dark brown at extreme base, quickly shading to pale dusky to beyond middle, then shading to dark brown which continues to apex. Tarsal segments concolorous with end of tibiae. Cornicles dusky with constricted area darker. Dorsum of abdomen with a few small brownish wax pore plates.

Head and thorax.—Antennal segments with the following lengths: III .435-.51 mm., IV .225-.285 mm. both lengths represented by a single case, most common length .24 mm., V .23-.315 mm. always longer than fourth antennal segment, on a given specimen, VI .15-17 + .06-.075 mm. Sensoria distributed as follows: III as a rule none, never more than one, primary sensorium present. IV one-two, as rule only one, the primary sensorium is present on this segment. V one plus primary. Hair on third segment fairly numerous upstanding, fine, varying in length, with one or two exceptions, less than width of segment, the shortest hairs being about .045 mm. in length, the longest about .08 mm. Second antennal segment with numerous hairs. The sixth antennal segment with very faint imbrications, the unguis nail-like, hair on unguis not confined to end. Extended rostrum reaching beyond cornicles. Last three segments of rostrum with the following lengths .30-.30-.12 or .285-.30-.12 mm. Head with numerous hairs which are slightly longer and coarser than those on antennae.

Width of head across eyes about .69 mm. Eyes small, with ocular tubercles the same. Mesosternal tubercle absent. Femora seemingly short varying from 1.02-1.27 mm. in length. Hind tibiae varying from




Gnara arcadiana

1.72-2.02 mm. Hair on hind tibiae fairly numerous, upstanding, fine, varying in length from .045-.075 mm. less than the width of the tibiae, the longest hairs are located near the apex of segment, in this location the hairs are slightly less upstanding. The hairs on the outer margin of the tibiae are longer than the hairs on the inner margin. First tarsal segment with about eight hairs on the ventral surface. First hind tarsal segment varying in length from .10-.12 mm. the second segment varying from .30-.33 mm.

Abdomen.—Dorsal and ventral surfaces of abdomen thickly clothed with long fine sharp pointed hairs, which are similar on both surfaces, these hairs vary from .12-.15 mm. in length. Cornicles extremely variable as to size, and shape of outer margin which is always very irregular. Extent of outer margin of cornicles varying from .12-.36 mm. Base of cornicles much broken, often with clear areas, frequently associated with free pigmented areas. Hairs on cornicles similar to those on abdomen and of one kind, not more numerous on constricted area than elsewhere. Genital plate very large, suggestive of the genital plate of an oviparous form, for which there is no further evidence. Cauda and anal plate with numerous hairs.

I know of no near allies to this species, on its host species *Picea glauca* indicated on slides as *Picea canadensis*. In Palmer's key to the genus *Cinara* in "Aphids of the Rocky Mountain Region" *Cinara acadiana* keys to *Cinara terminalis* G&P., a species with which it has nothing in common except the characters made use of in the key, and from which it may be distinguished at once by the numerous body hairs. From *Cinara piceae* (Panz.) as I think correctly determined by Dr. D. Hille Ris Lambers, this species differs greatly in the character of the hairs found on the tibiae, not being blunt, and in the sixth antennal segment not being strongly imbricated. The two species differ greatly and there is no need to mention other factors in which they differ. Holotype apterous viviparous female, Sept. 22, 1954, taken on *Picea glauca* Acadia Forest Experimental Station, New Brunswick, Canada. Collected by Mrs. M. E. MacGillivary, deposited in the Canadian National Collection, Ottawa, Canada.